

City of Warwick, Rhode Island Fire II Pension Fund

Actuarial Valuation
as of July 1, 2019



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DISCUSSION

I. Purpose and Summary

This report presents the results of our July 1, 2019 actuarial valuation of the City of Warwick, Rhode Island Fire II Pension Fund. The valuation was performed at the request of the City of Warwick for purposes of determining the employer and member contribution rates for the City's fiscal year beginning July 1, 2020.

The total contribution level for the 2020-2021 fiscal year is 43.01% of covered earnings as compared to 40.14% of covered earnings determined by the previous valuation. In accordance with the City's ordinances, two-thirds of the cost (or 28.67% of earnings) will be met by the City, with the remaining one-third (or 14.34% of earnings) contributed by covered active members.

The development of the valuation results is shown in Tables 1 through 9 and is described in more detail on the following pages.

II. Membership Data

The City furnished data for active members as of December 31, 2018. The data was projected to July 1, 2019 for valuation purposes reflecting anticipated age, salary and benefit increases, with some data adjustment after data questions responded. Although we did not audit this data, we did review it for reasonableness and consistency with the data collected for the previous valuation (prepared as of July 1, 2018). Table 4 provides a distribution by age and service for active members. There were 28 retirees as of June 30, 2019. There was also 3 inactive, non-retired members entitled to a future retirement benefit or a future refund.

III. Plan Provisions

A summary of the principal plan provisions recognized for purposes of the valuation is provided in Table 9. As a result of the recent arbitration award, effective with the valuation as of June 30, 2018, Tier I benefits will be granted to all members hired after 06/30/2012 (i.e. the former Tier II members).

IV. Assets

The City of Warwick furnished asset information for the fiscal year ending June 30, 2019. Tables 3a, 3b, and 3c provide information about the composition of plan assets and the development of valuation assets.

The asset value used in the determination of the annual contribution level is set equal to the market value of assets, adjusted to phase in the difference between actual and expected investment return over five years, at 20% per year. As shown in Table 3c, the market value of assets on June 30, 2019 was \$77,136,941 while the valuation assets were \$82,206,795 or 106.6% of the market value.

As shown in Table 3b, the dollar-weighted rate of return on the market value of assets for FY 2019 was 2.06%. This return is net of all investment expenses.

There was a large transfer during the year out of the trust that will be received during fiscal year 2020. We have recognized this in the contribution requirements by increasing the actuarial value of assets by the amount receivable \$2,200,000 during FY2020.

V. Actuarial Methods and Assumptions

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods.

There were no changes to the assumptions and methods since the last actuarial valuation. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of the City of Warwick, Rhode Island Fire II Pension Fund.

VI. Funding Policy

The plan is funded on an actuarially determined basis in accordance with the City's pension ordinances. The contribution amount determined by the July 1, 2019 valuation is projected with assumed base pay increases (2.75%) to determine the statutory contribution level for the 2020-2021 fiscal year. The increase in accrued liability as of July 1, 2016 due to the change in assumptions is ratably recognized over a five year period according to the schedule found in Table 2.

VII. Analysis of Changes

The funded ratio decreases from 85.3% to 82.1%. The funded status measure alone is not appropriate for assessing the need for future contributions. Also, the funded status is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations

The following shows a reconciliation of the contribution rate from the prior valuation to the new rate set by this valuation.

Contribution rate set by prior valuation	40.14%
Staggered recognition of 2016 assumption changes	0.60
Demographic and payroll changes	1.89
Asset Performance	0.38
Contribution rate set by current valuation	<u>43.01%</u>

VIII. Future Expectations

As a result of the recent arbitration award which provides Tier I benefits to all current and future members, the total contribution requirement for the City is expected to remain fairly level over the next decade. We commend the City for continuing to meet its actuarial contribution requirements as dictated by the approved funding policy. If the City continues to meet those obligations, we anticipate the funded ratio will increase consistently towards 100% over the next 17 years.

IX. Certification

We certify that the information included herein and contained in this Actuarial Valuation Report is accurate and fairly presents the actuarial position of the City of Warwick, Rhode Island Firefighters II Pension Fund as of the valuation date.

All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Joseph P. Newton and Paul T. Wood are Members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries. Finally, both of the undersigned are experienced in performing valuations for large public retirement systems.

We are available to answer any questions in connection with this valuation of the plan or the information presented in this report.



Joseph P. Newton, FSA, EA, MAAA
Pension Market Leader and Actuary



Paul T. Wood, ASA, FCA, MAAA
Consultant

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TABLES

Table 1

Valuation Results

	July 1, 2019	July 1, 2018
A. Membership Data		
1. Active members		
a. Number	182	187
b. Annualized Salaries	\$ 15,484,971	\$ 15,114,478
c. Average pay	\$ 85,082	\$ 80,826
d. Average attained age	39.1	38.3
e. Average past service	12.0	11.3
2. Retired members, beneficiaries, and inactives		
a. Number	31	24
b. Average benefit	\$ 49,061	\$ 45,113
c. Average attained age	46.9	51.2
B. Liabilities		
1. Actuarial accrued liability		
a. Active members	\$ 71,325,468	\$ 65,573,239
b. Retired members and beneficiaries	28,240,367	20,167,881
c. Inactive members	603,116	533,695
d. Total	\$ 100,168,951	\$ 86,274,815
2. Valuation assets	\$ 82,206,795	\$ 73,563,652
3. Unfunded actuarial accrued liability [(1)(d) - (2)]	\$ 17,962,155	\$ 12,711,163
4. Funded Ratio [(2)/(1)(d)]	82.1%	85.3%
C. Determination of City Contribution for FY+1		
1. Normal cost with interest	\$ 5,831,620	\$ 5,675,783
2. Amortization of unfunded liability (Table 2)	\$ 1,295,688	\$ 793,601
3. Total annual contribution [(1) + (2)]	\$ 7,127,308	\$ 6,469,384
4. Projected Covered Payroll	\$ 16,571,447	\$ 16,118,531
5. Contribution as a percentage of covered payroll [(3) / (4)]	43.01%	40.14%
6. City contribution as a percentage of payroll [2/3 x (5)]	28.67%	26.76%
7. Average member contribution rate [(5) - (6)]	14.34%	13.38%
a. Tier I Rate	N/A	N/A
b. Tier II Rate	N/A	N/A

Table 2

Summary of Amortization Bases

Date Established	Purpose	Initial Amount	Remaining Balance as of July 1, 2019	2020 - 2021 Amortization Payment*	Years Remaining as of June 30, 2020
7/14	Fresh Start, Offsetting of Prior Bases	\$ 3,779,979	\$ 3,462,835	\$ 377,615	11
7/15	2015 Experience (Gain)/Loss	(255,999)	(234,520)	(25,574)	11
7/16	2016 Experience (Gain)/Loss	211,851	205,811	17,327	16
** 7/16	2016 Assumption Change - FY19 Stagger	1,040,297	1,180,649	92,095	18
** 7/16	2016 Assumption Change - FY20 Stagger	1,040,297	1,270,839	95,814	19
** 7/16	2016 Assumption Change - FY21 Stagger	1,040,297	1,270,839	99,684	20
** 7/16	2016 Assumption Change - FY22 Stagger	1,040,297	1,270,839	-	21
** 7/16	2016 Assumption Change - FY23 Stagger	1,040,297	1,270,839	-	22
7/17	2017 Experience (Gain)/Loss	321,145	340,946	26,595	18
7/18	2018 Experience (Gain)/Loss	2,872,959	3,071,193	231,551	19
7/19	2019 Experience (Gain)/Loss	4,851,885	<u>4,851,885</u>	<u>380,581</u>	20
Total			\$ 17,962,155	\$ 1,295,688	

* Assuming payment made at the middle of the year.

Table 3A

Asset Information

Composition of Fund As of June 30, 2019

	Market Value	Percentage of Total
1. Cash and equivalents	\$ 1,283,205	1.7%
2. Equities, including index funds	41,869,062	54.3%
3. Fixed income investments	34,034,298	44.1%
4. Receivables less payables	<u>(49,624)</u>	<u>(0.1%)</u>
5. Total	\$ 77,136,941	100.0%

Table 3B

Asset Information

Asset Reconciliation and Expected Returns

	FY 2016	FY 2017	FY 2018	FY 2019
1. Beginning of year market value	49,536,539	52,607,801	64,558,640	73,583,027
2. Contributions				
a. City	2,973,277	3,149,947	3,561,858	3,646,246
b. Member	1,486,639	1,574,973	1,780,929	1,823,301
c. Other	-	-	-	(2,200,000)
d. Total	<u>4,459,916</u>	<u>4,724,920</u>	<u>5,342,787</u>	<u>3,269,547</u>
3. Benefits and admin expenses paid	(449,467)	(608,493)	(861,743)	(1,254,527)
4. Net return	(939,187)	7,834,412	4,543,343	1,538,894
5. End of year market value	52,607,801	64,558,640	73,583,027	77,136,941
6. Net market return	-1.82%	14.33%	6.80%	2.06%
7. Expected market value				
a. Beginning of year	49,536,539	52,607,801	64,558,640	73,583,027
b. Net cash flow	4,010,449	4,116,427	4,481,044	2,015,020
c. Earnings assumption	7.50%	6.90%	6.90%	6.90%
d. Expected earnings	3,865,632	3,769,586	4,606,564	5,145,588
e. Excess/(shortfall)	(4,804,819)	4,064,826	(63,221)	(3,606,694)

Table 3C

Asset Information

Development of Actuarial Value of Assets

	Year Ending July 1, 2019
1. Market value of assets at beginning of year	\$ 73,583,027
2. Net new investments	
a. Contributions	\$ 3,269,547
b. Benefits and admin expenses paid	(1,254,527)
c. Subtotal	2,015,020
3. Market value of assets at end of year	\$ 77,136,941
4. Net earnings (3-1-2)	\$ 1,538,894
5. Assumed investment return rate	6.90%
6. Expected return	\$ 5,145,587
7. Excess return (4-6)	\$ (3,606,693)
8. Development of amounts to be recognized as of June 30, 2019:	

Fiscal Year End	Remaining Deferrals of Excess (Shortfall) of Investment Income (1)	Offsetting of Gains/(Losses) (2)	Net Deferrals Remaining (3) = (1) + (2)	Years Remaining (4)	Recognized for this valuation (5) = (3) / (4)	Remaining after this valuation (6) = (3) - (5)
2015	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0
2016	0	0	0	2	0	0
2017	0	0	0	3	0	0
2018	19,375	(19,375)	0	4	0	0
2019	(3,606,694)	19,375	(3,587,319)	5	(717,464)	(2,869,855)
	\$ (3,587,319)	\$ 0	\$ (3,587,319)		\$ (717,464)	\$ (2,869,855)

9. Transfer Payable in FY2020	\$ 2,200,000
10. Actuarial value of assets as of June 30, 2019 (Item 3 - Item 8)	\$ 82,206,795
11. Ratio of actuarial value to market value	106.6%

*Values of \$0 result from the beginning balance being offset by future gains or losses in the opposite direction.

Table 4

Distribution of Active Members by Age and by Years of Service

As of July 1, 2019

Attained Age	Years of Credited Service												Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.
Under 25	0 \$0	0 \$0	3 \$67,579	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	3 \$67,579
25-29	0 \$0	0 \$0	10 \$68,302	0 \$0	0 \$0	11 \$79,108	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	21 \$73,963
30-34	0 \$0	0 \$0	7 \$67,627	0 \$0	0 \$0	27 \$82,059	12 \$82,895	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	46 \$80,081
35-39	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	15 \$83,942	9 \$83,846	3 \$85,481	0 \$0	0 \$0	0 \$0	0 \$0	27 \$84,081
40-44	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	3 \$82,614	4 \$85,257	16 \$89,371	0 \$0	0 \$0	0 \$0	0 \$0	23 \$87,774
45-49	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	4 \$84,084	23 \$90,858	11 \$101,020	0 \$0	0 \$0	0 \$0	38 \$93,087
50-54	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	2 \$82,980	10 \$90,096	7 \$97,390	1 \$111,560	0 \$0	0 \$0	20 \$93,011
55-59	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	4 \$89,701	0 \$0	0 \$0	0 \$0	0 \$0	4 \$89,701
60-64	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
65 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total	0 \$0	0 \$0	20 \$67,957	0 \$0	0 \$0	56 \$82,014	31 \$83,635	56 \$89,926	18 \$99,608	1 \$111,560	0 \$0	0 \$0	182 \$85,082

Table 5

History of Investment Return Rates

Year Ending June 30 of	Market	Actuarial
(1)	(2)	(3)
2000	28.23%	
2001	-30.40%	
2002	-13.11%	
2003	3.75%	
2004	13.73%	
2005	8.23%	
2006	7.71%	
2007	14.05%	9.46%
2008	-3.48%	7.26%
2009	-16.90%	1.67%
2010	13.14%	2.06%
2011	20.89%	5.74%
2012	0.28%	4.48%
2013	11.17%	10.56%
2014	14.69%	10.56%
2015	1.66%	7.85%
2016	-1.82%	5.55%
2017	14.33%	6.47%
2018	6.80%	6.92%
2019	2.06%	5.85%
Average Returns:		
Last 5 Years	4.46%	6.52%
Last 10 Years	8.08%	6.57%

Table 6

Near Term Outlook

Valuation as of July 1,	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Market Value of Fund	For Fiscal Year Ending June 30,	Employer Contribution Rate	Covered Compensation	Employer Contributions	Employee Contributions	Benefit Payments and Refunds	Net External Cash Flow
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2019	\$ 17,962,155	82.1%	\$ 77,136,941	2020	26.8%	\$ 16,127,929	\$ 4,315,834	\$ 2,157,917	\$ (393,974)	\$ 6,867,725
2020	19,023,939	82.8%	89,548,640	2021	28.7%	16,571,447	4,751,034	2,376,345	2,204,519	4,922,860
2021	19,543,322	84.0%	100,805,903	2022	29.2%	17,027,162	4,973,634	2,487,668	2,586,531	4,874,771
2022	19,789,846	85.2%	112,789,882	2023	29.7%	17,495,409	5,197,886	2,598,068	3,053,967	4,741,987
2023	19,735,207	86.4%	125,463,143	2024	29.7%	17,976,533	5,340,828	2,669,515	3,542,873	4,467,470
2024	18,798,630	88.1%	138,726,696	2025	29.7%	18,470,888	5,478,465	2,739,233	4,091,326	4,126,372

These projections are based on the current funding policy and assumes that all current assumptions are met each year in the future.

Table 7

Schedule of Funding Progress

Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial	Funded Ratio (2)/(3)	Annual Payroll	UAAL as % of Payroll (4)/(6)
			Accrued Liability (UAAL) (3) - (2)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
July 1, 2009	\$ 18,265,170	\$ 20,678,480	\$ 2,413,310	88.3%	\$ 8,816,280	27.4%
July 1, 2011	24,781,826	31,782,763	7,000,937	78.0%	9,354,240	74.8%
July 1, 2013	34,394,949	41,218,696	6,823,747	83.4%	11,299,967	60.4%
July 1, 2014	42,195,568	46,060,602	3,865,034	91.6%	11,548,952	33.5%
July 1, 2015	49,682,745	53,252,922	3,570,177	93.3%	13,302,964	26.8%
July 2, 2016	56,561,310	65,498,628	8,937,318	86.4%	13,917,985	64.2%
July 1, 2017	64,469,586	74,002,098	9,532,512	87.1%	14,141,458	67.4%
July 1, 2018	73,563,652	86,274,815	12,711,163	85.3%	15,114,478	84.1%
July 1, 2019	82,206,795	100,168,951	17,962,155	82.1%	15,484,971	116.0%

Table 8

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	5.0
Ratio of actuarial accrued liability to payroll	6.5
Ratio of actives to retirees and beneficiaries	5.9
Ratio of net cash flows to market value of assets	2.6%
Duration of the actuarial accrued liability	21.7

TABLE 9

Actuarial Methods and Assumptions

Actuarial Cost Method:	<i>Entry Age Normal actuarial cost method.</i> Under this method, the normal cost is the amount calculated as the level percentage of pay necessary to fully fund each active member's prospective benefit from entry age to retirement age. The total actuarial accrued liability, which is re-determined for each individual member as of each valuation date, represents the theoretical accumulation of all prior years' normal costs for the active members as if the present plan had always been in effect, plus the liability for any retirees or beneficiaries. The unfunded actuarial accrued liability represents the excess of the total actuarial accrued liability over the valuation assets.
Amortization Policy:	The amortization of the UAAL is determined as a level percentage of payroll over a closed period using the process of "laddering". Bases that existed prior to this valuation continue to be amortized on their original schedule. New experience losses are amortized over individual periods of 20 years. New gains are offset against and amortized over the same period as the current largest outstanding loss which in turn decreases contribution rate volatility.
Asset Valuation Method:	The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

Actuarial Methods and Assumptions (Continued)

1. Interest

6.90% per year, net of investment expenses.

2. Salary Increases

The sum of (i) a 3.50% wage inflation assumption (composed of a 2.75% price inflation assumption and a 0.75% additional general increase), and (ii) a service-related component as shown below:

Police/Fire Employees		
Years of Service	Service-Related Component	Total Increase
1	10.00%	13.50%
2	9.00	12.50
3	7.00	10.50
4	4.00	7.50
5	2.50	6.00
6	3.00	6.50
7	0.50	4.00
8	0.50	4.00
9 or more	0.00	3.50

Salary increases are assumed to occur once a year, on January 1. Therefore the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. For employees with less than one year of service, the reported rate of pay is used rather than the fiscal year salary paid.

Actuarial Methods and Assumptions (Continued)

3. Mortality

A. Pre-retirement mortality (combined ordinary and duty):

- a. Male employees: 115% of the RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA.
- b. Female employees: 95% of the RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA.
- c. Disabled males – 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits.
- d. Disabled females – 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

B. Pre-retirement mortality (combined ordinary and duty):

- a. Male employees: 75% of RP-2000 Combined Healthy for Males with White Collar adjustments.
- b. Female employees: 75% of RP-2000 Combined Healthy for Females with White Collar adjustments.

Sample rates are shown below:

Number of Deaths per 100		
Age	Males	Females
25	0.03	0.02
30	0.03	0.02
35	0.04	0.03
40	0.07	0.05
45	0.10	0.08
50	0.15	0.12
55	0.25	0.19
60	0.42	0.35
65	0.83	0.65
70	1.45	1.14

Actuarial Methods and Assumptions (Continued)

4. Disability

Sample rates per 1,000 active members are shown below. Ordinary disability rates are not applied to members eligible for retirement.

Age	Number of Disabilities per 1,000	
	Ordinary, Males and Females	Accidental, Males and Females
25	0.26	2.55
30	0.33	3.30
35	0.44	4.35
40	0.66	6.60
45	1.08	10.80
50	1.82	18.15
55	1.82	18.15
60	1.82	18.15
65	1.82	18.15

5 . Termination:

Termination rates (for causes other than death, disability, or retirement) are a function of the member's service. Termination rates are not applied to members eligible for retirement. Rates are shown below:

Service	Termination Rate	Service	Termination Rate
1	0.100000	11	0.012761
2	0.047300	12	0.011332
3	0.036903	13	0.010026
4	0.030821	14	0.008826
5	0.026506	15	0.007714
6	0.023158	16	0.006679
7	0.020424	17	0.005711
8	0.018111	18	0.004802
9	0.016108	19	0.003944
10	0.014342	20+	0.000000

Actuarial Methods and Assumptions (Continued)

6. Retirement

Rates of retirement are based on an employee's length of service, as follows:

Retirement Election for Fire II Members		
Service	Tier I	Tier II
20	12%	
21	10%	
22	10%	
23	10%	
24	12%	
25	14%	10%
26	16%	2%
27	18%	2%
28	20%	2%
29	20%	2%
30+	35%	100%

7. Benefit and Compensation Limits

Benefit limits under Section 415 and compensation limits under Section 401(a)(17) of the Internal Revenue Code are assumed to have no impact on benefits earned under this plan.

8. Marriage / Dependents

80% of active employees are assumed to be married at retirement or death, with two children ages 11 and 13. Wives are assumed to be three years younger than their husbands. No remarriage is assumed.

9. Service Purchase

None assumed.

10. Administrative and Investment Expenses

None. The 6.90% investment return assumption represents the assumed return net of all investment expenses. Administrative expenses are assumed to equal the actual administrative expenses from the prior fiscal year.

TABLE 10

Outline of Principal Plan Provisions

1. Effective Dates:	
a. Original Plan	May 29, 1992.
2. Eligibility:	All permanent members of the fire department hired on or after May 29, 1992.
3. Tier:	Currently, all members are eligible for Tier 1 benefits. Prior to this valuation, Members hired by June 30, 2019 were eligible for Tier I benefits while members who join later were eligible for Tier II benefits. Tier II benefits are disclosed below for comparison purposes.
4. Final Average Salary(FAC):	<p>Tier I: Salary received in the highest year of creditable service.</p> <p>Tier II: Average of the salaries received in the last three years of creditable service.</p> <p>For pension purposes, annual salary includes regular, holiday, and longevity pay.</p>
5. Retirement:	
a. Eligibility	<p>Tier I: Members who have completed 20 years of service may retire.</p> <p>Tier II: Members attain age 50 or older and with at least 25 years of service may retire.</p>
b. Benefit Formula	<p>Tier I: The annual benefit at retirement is equal to 50% of annual salary at retirement, plus 2% of annual salary for each year of service between 20 and 25, plus 3% of annual salary for each year of service between 25 and 30.</p> <p>Tier II: 2% of FAC times years of service.</p>
c. Maximum Benefit	<p>Tier I: 75% of FAC.</p> <p>Tier II: 70% of FAC.</p>
d. Commencement Date	Retirement benefits commence as of the first payroll period after retirement.
e. Form of Payment	The annual benefit calculated in accordance with the formula in (b) above is payable semi-monthly for the remainder of the retired member's life, with 67.5% of the member's benefit payable for the lifetime of his surviving spouse.

Outline of Principal Plan Provisions (Continued)

4. Vested Termination:

- | | |
|----------------------|---|
| a. Eligibility | Upon termination of employment after 10 years of service a member is eligible for a benefit deferred to retirement age. |
| b. Benefit Formula | 2.5% of average salary multiplied by full years of service at termination. |
| c. Commencement Date | 20th anniversary of employment. |
| d. Form of Payment | Same as retirement. |

5. Disability Retirement:

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|----------------------|---|
| a. Eligibility | A member who is unable to perform active duty as a result of disability which the Board of Public Safety finds to be permanently incapacitating is eligible to receive disability retirement benefits. |
| b. Benefit Formula | <p><u>Service Related:</u></p> <p>For Tier I members: The benefit would be equal to 66-2/3% of highest annual salary, reduced for each dollar of earned income in excess of the salary the member would earn as an active employee, to a minimum of 50% of salary.</p> <p>For Tier II members: The benefit would initially be the same, but once the member reached 25 years of service, including service while disabled, the benefit would be converted to a regular retirement benefit (The age 50 minimum for retirement would not apply to this benefit.).</p> <p><u>Other Service Related and Non-Service Related:</u> 50% of average salary.</p> |
| c. Commencement Date | Benefits commence as of the first payroll period after disability. |
| d. Form of Payment | Same as retirement. |

6. Non-vested Termination of Employment:

A member who leaves employment prior to completing 10 years of service will receive a lump sum payment of his accumulated contributions without interest.

Outline of Principal Plan Provisions (Continued)

7. Death Before Retirement -- Survivor Annuity Benefits

- | | |
|----------------------------------|---|
| a. Eligibility | Death while actively employed. |
| b. Benefit Formula | |
| (1) Surviving spouse | <p><u>Service Related.</u> The annual benefit is 50% of the deceased member's average salary, payable to the surviving spouse until death or earlier remarriage.</p> <p><u>Non-Service Related.</u> 30% of the deceased member's average salary, payable to the surviving spouse until death or earlier remarriage.</p> |
| (2) Surviving children | 10% of the deceased member's average salary, payable to each surviving child until his 18th birthday (or for life if such child becomes permanently disabled prior to the member's death). |
| (3) Maximum family death benefit | <p><u>Service Related.</u> 75% of deceased's average salary.</p> <p><u>Non-Service Related.</u> 50% of deceased's average salary.</p> |
| c. Commencement Date | Benefits commence as of the first payroll period after death. |
| d. Form of Payment | Surviving spouse's and children's benefits are payable semi-monthly. |

8. Death Before Retirement -- Lump Sum Refund of Contributions

A lump sum payment equal to the member's accumulated contributions without interest shall be paid to the estate of any active member who dies with no surviving spouse or children.

Outline of Principal Plan Provisions (Continued)

9. Retiree Cost-of-Living Increases

For Tier I members: All benefits in pay status are increased by 3% annually.

For Tier II members: All benefits in pay status are increased by 75% of CPI, annual cap of 3%.

10. Service Purchase

For Tier I member:

An active employee eligible to retire who has served in the U.S. armed forces may "purchase" additional years of service up to his number of years of military service, but no more than four years. A member may also purchase up to four years of prior civilian employment time with the City of Warwick. Either purchase would require the employee to contribute to the fund, at retirement, an amount which represents the actuarial equivalent value of the benefit increase purchased.

For Tier II member: the right to buy municipal service is eliminated.

11. Employee Contributions

Members contribute a percentage of their covered earnings (regular, holiday, and longevity) equal to one third of the actuarially determined contribution rate.